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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,400	12/28/2001	Shinji Yamasoto	7388/72545	1864

22242 7590 08/11/2003

FITCH EVEN TABIN AND FLANNERY
120 SOUTH LA SALLE STREET
SUITE 1600
CHICAGO, IL 60603-3406

EXAMINER

PICKETT, JOHN G

ART UNIT	PAPER NUMBER
3728	7

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

CS

Interview Summary	Application No.	Applicant(s)
	10/019,400	YAMASOTO ET AL.
	Examiner Greg Pickett	Art Unit 3728

All participants (applicant, applicant's representative, PTO personnel):

(1) Greg Pickett.

(3) _____.

(2) Kendrew H. Colton.

(4) _____.

Date of Interview: 05 August 2003.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: none.

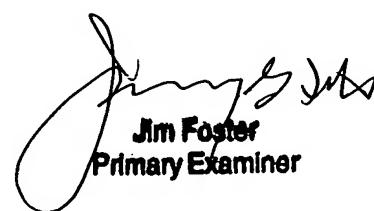
Identification of prior art discussed: JP 04-189799 A.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant requested a translation of the document since the examiner cited actual passages of the reference in the previous Office action. A copy of the translation was faxed to the applicant's representative and is attached hereto.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.



Jim Foster
Primary Examiner

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

1.028 8/8/03
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

*** TX REPORT ***

TRANSMISSION OK

TX/RX NO 1399
CONNECTION TEL 912024197007
SUBADDRESS
CONNECTION ID
ST. TIME 08/05 11:21
USAGE T 02 '39
PGS. 11
RESULT OK



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Fax Cover Sheet

Date: 05 Aug 2003

To: Kendrew H. Colton	From: Greg Pickett
Application/Control Number: 10/019,400	Art Unit: 3728
Fax No.: 202-419-7007	Phone No.: 703-305-8321
Voice No.: 202-419-7000 x7015	Return Fax No.: 703-872-9302
Re: Translation of Reference	
CC:	

Urgent For Review For Comment For Reply Per Your Request

Comments:

Per your request, attached is PTO Translation 2003-3872 of JP 04-189779 A. The thickness reference can be found on page 5 of the translation.



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Number of pages 11 including this page

STATEMENT OF CONFIDENTIALITY

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Japanese Published Unexamined Patent Application (A) No. 04-189779, published July 8, 1992; Application Filing No. 01-319902, filed November 22, 1990; Inventor(s): Yuuichi Itoo; Assignee: Maruya Chemical and Mechanical Engineering Corporation; Japanese Title: Light Packing Sheets and Light Packing Bags Thereof

Light Packing Sheets and Light Packing Bags Thereof

CLAIM(S)

- 1) A light packing sheet member characterized in that a water-absorbing layer is formed on the back surface of a substrate having a steam barrier property, and that a water-permeable adhesive film layer is formed on the back surface of said water-absorbing layer.
- 2) A light packing bag characterized in that the sheet member, wherein the water-absorbing layer is formed on the back surface of a substrate having a steam barrier property and the water-permeable adhesive film layer is formed on the back surface of said water-absorbing layer, is folded orienting its adhesive film layer inward, and in that the necessary place of the overlapped section of said adhesive film layer is heat-sealed.

DETAILED DESCRIPTION OF THE INVENTION

(Field of Industrial Application)

The present invention pertains to a light packing sheet and light packing bag thereof for packing pharmaceutical products, food products,

cosmetics, parts for semiconductor products and machines used in high tech industries that need to avoid humidity.

(Prior Art)

As an representative example of a light-packing bag used for the aforementioned purpose, a technology disclosed in Japanese Published Unexamined Patent Application 01-144345 is well known. The light packing bag disclosed in this patent is shown in Fig. 3 and Fig. 4. In the figure, 1 indicates the packing bag, and 2 the sheet member for forming the packing bag 1. The sheet member 2 is prepared by installing moisture-resistant coating layer 4 on the bottom surface of the substrate 3, installing heat-sealing layer 6 on the bottom surface of the moisture-resistant coating layer 4 via heat-sealing layer 6, and impregnating the heat-sealing layer 6 with moisture-absorbing agent (water-absorbing agent) 7.

Said packing bag 1 is made by folding said sheet member 2 by orienting heat-sealing layer 6 inward and by heat-sealing the necessary place 8 of the overlapped section of the heat-sealing layer 6. This heat-sealing layer 6 is made of thermoplastic resin. Since the resin contains moisture-absorbing agent 8, as mentioned earlier, it can absorb moisture inside the bag.

(Problems of the Prior Art to Be Addressed)

The aforementioned prior art light packing bag is free from the problem of sealing a package of a drying agent or of solid drying agent in the packing bag along with a product, but the moisture-absorbing agent is exposed to the inner surface of packing bag with which the product contacts, which causes a problem that the moisture-absorbing agent is attached to the product.

If the heat-sealing layer 6 contains a large amount of moisture-absorbing agent to improve the moisture absorbing performance, e.g., an amount of moisture to be absorbed, its bonding performance is reduced, losing its durability. On the other hand, if the content of the moisture absorbing agent is reduced to improve the bonding performance, the moisture absorbing performance will be extremely reduced, losing the purpose of a packing bag, which is not appropriate.

The present invention, to solve the aforementioned problems, attempts to present a dust-proof light packing sheet member that is adjustable in water-absorbing speed, excellent in heat-sealing performance and processable into a bag, as well as a highly moisture-absorbent light packing bag wherein the moisture-absorbing agent is not exposed to the inner surface with which the product contacts.

(Means to Solve the problems)

To accomplish the aforementioned problem, in the first structure of the present invention, a water-absorbing layer is installed on the back surface of the substrate having a steam-barrier function and a water-permeable adhesive film layer is formed on the back surface of said water-absorbing surface; in the second structure of the present invention, the sheet member explained as the first structure is folded orienting the adhesive film layer inward, and the necessary place of the overlapped section of the adhesive film is thermally bonded.

(Operation)

According to the aforementioned structures, the water-absorbing speed can be adjusted by selecting the thickness of the adhesive film formed on the back surface of the water-absorbing layer, so the water-suction performance can be preserved over the long time.

The supporting member, which becomes a steam-barrier layer, and the water-permeable adhesive film layer interpose the water-suction layer, so external moisture penetration can be prevented and the dust-proof property can be well preserved.

(Embodiment Example)

The present invention is explained with reference to one embodiment example shown in Fig. 1 – Fig. 2.

Fig. 1 shows an expanded sectional view of the sheet member of the present invention. In the figure, 11 indicates the sheet member of the present invention, and 12 the substrate of the sheet member 11. The substrate 12 is made of material having a steam-barrier function, e.g., aluminum composite film. In this case, the thickness and hardness of the substrate are selected to be suitable for accommodating a part for machines and semiconductor products used in high technology industries and a pharmaceutical product, a food product, and a cosmetic product, but generally the thickness is set at
→ approx. 10 – 50 μ .

In the figures, 13 shows the water-absorbing layer formed on the bottom surface of said substrate 12. The water-absorbing layer 13 is, for example, prepared by sealing a proper amount of physical absorption-type (porous) water-absorbing material 13a (e.g., silica gel, active alumina, and synthetic zeolite) in olefin group synthetic resin material. The water-absorbing layer 13 thus prepared is free from water-solubility, corrosion, and from salty water-solubility but is excellent in safety and cleanness. This water-absorbing layer 13 and the substrate 12 are bonded with an adhesive

or by some other method (e.g., lamination process). This water-absorbing performance of water-absorbing layer 13 can be determined by types of water-absorbing material in the water-absorbing layer 13.

In the figures, 14 indicates a water permeable adhesive film layer formed on the back surface of the water absorbing layer 13, and the adhesive film layer 14 is made of heat-sealable chemical resistant thermoplastic resin material, e.g., nylon, polycarbonate, polystyrene, or polyethylene. By selecting the thickness and material of the adhesive film layer 14, the water absorbing speed of the water suction layer 13 can be adjusted. For this water content adjustment, fine pores may be made in the film layer if necessary. The formation of adhesive film layer 14 is necessary to provide sheet member 11 with heat-sealability (bag processability) and to provide it with a dust-proof characteristic in cooperation with said substrate 12.

Fig. 2 shows a perspective view of the light packing bag formed by said sheet member. The light packing bag 20 is formed by folding the sheet member 11 by orienting the adhesive film layer 14 inward, and by heat-sealing the necessary place of the overlapped section (hatched section outside the dotted line) of the adhesive film layer 14.

With the light packing bag 20, the substrate 12 constituting the sheet member 11 prevents the moisture penetration from the outside, and inside the bag, water absorption layer 13 absorbs water. Therefore, a product inside the bag (e.g., pharmaceutical products, food products, cosmetics, machine parts or semiconductor products used in high technology industries) can be preserved in dry state. In addition, with the light packing bag 20 of the present invention, the moisture absorbing agent (water-absorbing layer) is covered with the adhesive film layer 14 and is not exposed, so the product will not have a chemical change. Also, the product will not be contaminated with the moisture-absorbing dust.

The light packing sheet of the present invention and light packing bag made of this sheet are not limited to that of the above embodiment example but can take variant forms within the basic idea of the present invention.

(Advantage)

As explained above, in the present invention, on the back surface of the water-absorbing layer formed the back surface of the substrate, a water-permeable adhesive film layer is formed to adjust the water absorbing speed, so the water-absorbing performance can be preserved over the long period. The adhesive film layer formed on the back surface of the water-absorbing layer, unlike the prior art one, does not contain the absorbing agent that

prevents the heat-sealability, so it is suited to be processed into bags. In addition, the water-absorbing layer, for its being interposed by the substrate and the adhesive film layer, is excellent in dust-proof characteristic.

With the light packing bag made out of the sheet of the present invention, its substrate prevents the moisture penetration from the outside, and inside the bag, the water content is absorbed by the water-absorbing layer through the adhesive film layer, so the moisture-absorbing agent (drying agent) is not exposed in the bag. There, the product in the bag is not subjected to a chemical change and will not be contaminated with the moisture-absorbing agent, producing various excellent advantages.

BRIEF DESCRIPTION OF THE DRAWINGS

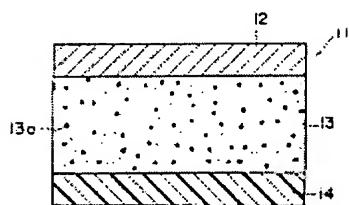
Fig. 1 – Fig. 2 indicate one embodiment example of the present invention. Fig. 1 shows an expanded sectional view of the sheet member. Fig. 2 shows a perspective view of the appearance of the bag. Fig. 3 shows an expanded sectional view of the prior art. Fig. 4 shows a perspective view of the appearance of the bag.

11. sheet member
12. substrate
13. water-absorbing layer
14. adhesive film layer

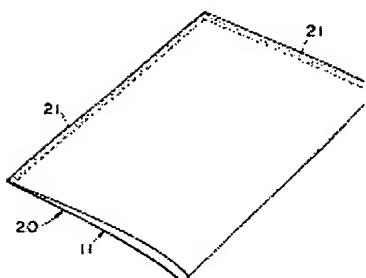
20. light packing body

21. heat-sealing section

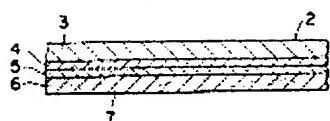
第 1 図



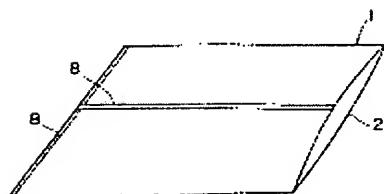
第 2 図



第 3 図



第 4 図



Translations
U. S. Patent and Trademark Office
6/13/03
Akiko Smith